

Course Descriptions Master 2021-2022

Course Title Empirical Econometrics 1
 Course Code EBC4184
 ECTS Credits 6,5
 Assessment Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
1	30-8-2021	15-10-2021	X		X		

Level Advanced

Coordinator Martin Schumann For more information: m.schumann@maastrichtuniversity.nl

Language of instruction English

Goals The purpose of this course is to review and discuss a number of econometric and statistical techniques that are essential for empirical research in economics.

Description The course would be devoted to techniques that are mainly used in microeconomic studies, labour economics, technology, industrial Organization. The emphasis will be on the understanding of the fundamentals behind the techniques used, their applicability, empirical relevance, economic interpretation, their limitations, both from an empirical and methodological point of view. Each topic will be illustrated by empirically papers published in a leading economic journal illustrating the use of the techniques.

The students will work on empirical paper(s)/project(s) to learn the applications of the techniques and models discussed. The econometrics/statistical package that will be mainly used through the course is STATA.

List of possible topics that will be discussed during the course:

- * Causal models, OLS, IV
- * Binary outcome models (logit, probit ...)
- * Unobserved heterogeneity
- * Multinomial models
- * Tobit and selection Models
- * Treatment Effect causal models, policy evaluation, regression discontinuity, ...
- * Survival analysis and transition analysis
- * GMM estimation of intertemporal models in microeconomics
- * Count data models, poisson regression models

Literature Cameron, A.C. and P. K. Trivedi (2005), Microeconometrics: Methods and Applications, (Cambridge University Press, Cambridge) .
 Angrist, J.A. and J.S. Pischke (2009), Mostly Harmless Econometrics, (Princeton University Press, Princeton).
 Greene, W.H. (2007) Econometric Analysis, (Prentice Hall, New York).
 Wooldridge, Jeffrey M. (2011), Econometric Analysis of Cross Section and Panel Data, 2nd edition (MIT Press, Cambridge).
 Empirical papers from leading economic journals.

Prerequisites We assume that the students entering the Research master and following this course have at least a level comparable to the IES bachelor course Empirical Econometrics; have a good working knowledge of matrix algebra, of integrals calculus and are familiar with concepts from probability theory and mathematical statistics.

Teaching methods PBL / Presentation / Lecture / Assignment / Groupwork

Assessment methods Participation / Written Exam / Oral Exam

Evaluation in previous academic year For the complete evaluation of this course please click <http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM>

This course belongs to the following programme / specialisation

Master Business Research - No specialisation	Year 2 Methodology Elective(s)
Master Business Research - Operations Research	Year 1 Elective Course(s)
Master Business Research - Operations Research	Year 2 Elective Course(s)
Master Economic and Financial Research - No specialisation	Year 1 Compulsory Course(s)